

- 38 -

What is claimed is:

1. A die casting machine for injecting and filling molten metal into a cavity formed between a pair of dies so as to form a casting, comprising:

5 a first ejecting pin for ejecting a casting formed inside said cavity from the dies and

a release agent feeding means for feeding a powder release agent for promoting release of the casting from said dies,

10 said first ejecting pin comprising a release agent feed path for guiding powder release agent fed from said release agent feeding means to a front end of said first ejecting pin and feeding it to said cavity from there.

15 2. A die casting machine as set forth in claim 1, further comprising:

a second ejecting pin not provided with said release agent feed path and

20 a drive means for making said first ejecting pin provided with said release agent feed path move with respect to said cavity independently from said second ejecting pin not provided with said release agent feed path.

25 3. A die casting machine as set forth in claim 1, further comprising:

- 39 -

a lubricant feeding means for feeding a powder lubricant for reducing friction between a sleeve communicated with said cavity and fed with the molten metal and a plunger for injecting and filling molten metal fed to said sleeve toward said cavity,

said first ejecting pin provided with said release agent feed path being provided with a lubricant feed path for guiding powder lubricant fed from said lubricant feeding means to a front end of said first ejecting pin and feeding it to said sleeve from there.

4. A die casting machine as set forth in claim 1, further comprising:

an evacuating means for evacuating and reducing the pressure in said cavity in the state with the dies clamped, and

starting the evacuation by said evacuating means, feeding said powder release agent through said first ejecting pin to the inside of said cavity and dispersing the fed powder release agent to make it deposit on an inside surface of said cavity by a flow of air generated by the evacuation.

5. A die casting machine as set forth in claim 3, wherein

said first and second ejecting pins are provided to be able to stick out into a runner in said

- 40 -

cavity,

said release agent feed path opens facing said cavity side at the front end of the corresponding ejecting pin, and

5 said lubricant feed path opens facing said sleeve side at the front end of the corresponding ejecting pin.

6. A die casting machine comprising:

a pair of dies;

10 a sleeve having two split parts held at said dies, communicated with a cavity formed between said dies, and fed with a molten metal;

a plunger fitting into said sleeve and injecting and filling molten metal fed to said sleeve
15 toward said cavity;

an electromagnetic pump for feeding molten metal inside said sleeve through a melt feed pipe connected to one of the split parts of said sleeve;

an evacuating means for evacuating and reducing
20 the pressure inside said cavity in the state with said dies clamped;

a release agent feeding means for feeding inside said cavity a powder release agent for promoting release of a casting from said die during evacuation by
25 said evacuating means;

- 41 -

a lubricant feeding means for injecting toward
an inner circumference of said sleeve a powder lubricant
for reducing friction between the inner circumference of
said sleeve and said plunger after the end of evacuation
5 by said evacuating means; and

a gas evacuating means for evacuating gas
inside said cavity and sleeve to the outside when a
pressure inside a closed space formed by inner surfaces
of said cavity and sleeve and a liquid surface of molten
10 metal inside said melt feed pipe rises above ambient
pressure.

7. A die casting machine as set forth in claim 6,
wherein said gas evacuating means has a check valve
provided between a chill-vent provided between said dies
15 and the out of the dies.

8. A die casting machine as set forth in claim 7,
wherein said gas evacuating means has a check valve
provided between an evacuation path connecting said
evacuating means and said cavity and the out of the dies.